GOVERNMENT OF INDIA
RAILWAYS
LOK SABHA

STARRED QUESTION NO:160
ANSWERED ON:11.12.2003
INSTALLATION OF TRAIN PROTECTION AND WARNING SYSTEM (TPWS)
BASUDEB ACHARIA;DALPAT SINGH PARASTE

Will the Minister of RAILWAYS be pleased to state:

(a) whether the Railways had adopted a new Train Protection and Warning Sustem (TPWS), a varient of AWS (Auxiliary Warning Sustem) as per the recommendation of Khanna Committee to strengthen the safety and security of passengers and rail installations;

(b) if so, the details thereof and the total kilometers of railway track covered by this system so far;

(c) whether the present system and new system proved to be successful and satisfactory;

(d) if so, whether the Railways has proposed to cover entire network with warning system;

(e) if so, the progress made in this regard;

(f) whether the Indian Institute of Technology (IIT) has also developed an Automatic Detection Signal System to check train accidents; and

(g) if so, the details thereof and the progress made in introduction of such system in the Railways?

Answer

MINISTER OF RAILWAYS (SHRI NITISH KUMAR)

(a) to (g): A statement is laid on the the Table of the Sabha.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (g) OF STARRED QUESTION NO.160 TO BE ANSWERED IN SABHA ON 11-12-2003 REGARDING INSTALLATION OF TRAIN PROTECTION AND WARNING SYSTEM (TPWS).

(a): Yes, Sir.

(b) & (c): It has been planned to adopt Train Protection and Warning Sustem (TPWS), a varient of Auxiliary Warning Sustem (AWS), to further enhance safety levels in train operations by preventing cases of `Signal passed at danger`, on 280 Track Kilometres (TKms) of `A` route on Southern and North Central Railways, on trial basis.

At present AWS is working satisfactorily in Mumbai Suburban sections of Central and Western Railways. Though its earlier version could not function on Howrah-Mughalsarai section of Indian Railways due to frequent thefts of track magnets, which are basically made of Copper. The new proposed TPWS system, uses Euro Balise in place of track magnets and has very little Copper, is still to be provided on Indian Railways. Salient features of AWS and TPWS are as follows:

(i) The conventional AWS system uses track magnets, which are basically made of Copper, making it prone to thefts. In this system, information about signal aspect, is transmitted from track device to cab equipment through electro magnetic induction.

(ii) TPWS uses Euro Balise as a track device, which is an electronic device with very less copper inside and it uses radio transmission for sending information to cab equipment.

(d): No, Sir.

(e): Does not arise.

(f): No, Sir.

(g): Does not arise.